

Claim Amendments

1-48 (canceled).

49 (new). A material in the form of non-agglomerated particles, comprising substrate particles less than about 500 microns in size having on the surface thereof an inorganic film formed by an atomic layer deposition process, wherein the inorganic film has a thickness of up to 100 nanometers.

50 (new). The material of claim 49, wherein the substrate particles are from 0.001 to 100 microns in size, and the inorganic film has a thickness of from 0.1 to 50 nanometers.

51 (new). The material of claim 50, wherein the substrate particles are from 0.005 to 50 microns in size.

52 (new). The material of claim 51, wherein the inorganic film has a thickness of from 0.5 to 35 nanometers.

53 (new). The material of claim 50, wherein the substrate particles are from 0.1 to 10 microns in size.

54 (new). The material of claim 53, wherein the inorganic film has a thickness of from 1 to 20 nanometers.

55 (new). The material of claim 50, wherein the substrate particles are from 0.4 to 10 microns in size.

56 (new). The material of claim 55, wherein the inorganic film has a thickness of from 1 to 20 nanometers.

57 (new). The material of claim 49, wherein the substrate particles have a diameter of less than 10 nanometers.

58 (new). The material of claim 53, wherein the substrate particles are boron nitride or iron.

59 (new). The material of claim 48, wherein the substrate particles are zirconia.

60 (new). The material of claim 59, wherein the inorganic film is titanium oxide.

61 (new). A method for depositing an inorganic film on substrate particles comprising conducting a sequence of two or more self-limiting reactions at the surface of said substrate particles to form coated particles having an inorganic film of up to 100 nanometers in thickness bonded to the surface of said substrate particles, wherein the reactions are conducted in a rotating vessel containing the substrate particles.

62 (new). The method of claim 61 wherein said sequence of reactions is a binary sequence of reactions comprising contacting the substrate particle alternately with a first reagent and a second reagent, where the first and second reagents react to form the inorganic film.

63 (new). The method of claim 62 which is conducted continuously.

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